#### VIA EXPRESS MAIL

Express Mail No.: EL642116200US

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to Commissioner of Patents and Trademarks,

Washington D.C. 2023 of June 24, 2011 Washington, D.C. 20231 on

Signature

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Christoph Seidel, et al.

Serial No.:

Divisional of Serial No. 08/892,704

Filed:

Concurrently herewith

For:

METHOD FOR DETERMINING EARLY HCV SEROCONVERSION

Group Art Unit:

To be Assigned

Examiner:

To be Assigned

June 28, 2001

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

#### PRELIMINARY AMENDMENT

Prior to examination, please amend this application as follows:

# IN THE SPECIFICATION

Prior to "Description" as -- Related Applications. This application is a divisional of Serial No. 08/892,704, filed September 15, 1997, which is a divisional of Serial No. 08/511,759 filed August 7, 1995 --.

Page 1, line: after "931" add -- incorporated by reference --;

line 27: delete "the"; change "of" to -- encoded by --.

Page 2, line 22: after "high" add -- degree of --;

line 23: delete "of the test";

line 28: change "was" to -- is --;

line 29: change "from" to -- encoded by --.

Page 3, line 5: delete "the";

line 9: change "," to --. More preferably they contain amino acids --;

line 10: delete "a";

line 12: change "." to -- incorporate by reference --;

```
line 22: change "can be particularly" to -- is --;
        line 25: change "No.1" to -- NO: 1 --;
        line 27: change "forein" to -- foreign --;
        line 29: delete "particularly" and "the";
        line 31: change "No.1" to -- NO: 1 --.
Page 4, line 16: delete "a";
        line 25: after "addition" add --, --;
        line 27: change "originating from" to -- of --;
        line 28: delete "a".
Page 5, line 1: delete "a";
        line 4: delete "particularly";
        line 9: after "addition" and --, --
        line 15: delete "a";
        line 20: change "polypeptide" to -- polypeptides --;
        line 21: change "exhibits a" to -- exhibit --;
        line 27: delete "a";
        line 31: delete "an".
Page 6, line1: change "polypeptide" to -- polypeptides --;
        line 2: change "is" to -- are --;
        line 3: after "addition" and --, --; change "a" to -- an isolated --;
        line 7: change "insertion" to -- encoding the peptide of interest inserted --;
        line 8: change "No.1" to -- NO: 1 --;
        line10: change "polypeptide" to -- polypeptides --; change "No.1" to -- NO: 1 --;
        line 18: change "in addition" to -- also --;
       line 27: delete "particularly".
Page 7, line 7: change "particularly" to -- more --;
       line 14: delete "a".
Page 8, line 13: after "labelled" and --, --;
       line 17: after "sensitivity" add -- of the assay --;
       line 19: before and after "i.e." add --, --;
       line 23: change "for example be bound" to -- be found, for example, --.
Page 9, line 5: after "blank" add -- value --;
       line 16: change "dithio-erythritol" to -- dithioerythritol --;
```

line 27: delete and replace by -- This patent application is incorporated by reference --.

```
Page 10, line 9: change "or/and" to -- and/or --;
line 16: change "in addition" to -- also --.

Page 11, line 19: change "are for example" to -- may include --;
line 21: after "vaccines" add -- may --.

Page 13, line 24: change "TTA" to -- TAA --.

Page 14, line 15: change "1 1" to -- one liter --.

Page 15, line 1: change "it" to -- this --;
line 9: after "ml" add -- of --;
line 11: before "can" add -- , --;
line 14: change "in the following" to -- infra --.

Page 16, line 8: change "in the" to -- on --.

Page 18, line 9: change "A good" to -- Good --.
```

### IN THE CLAIMS

Cancel claims 1-26 without prejudice.

Add claims 27-36 which follow:

Claim 27: A method for early recognition of seroconversion, comprising: incubating a sample taken from a subject, under reducing conditions which prevent formation of covalent, cross linked molecular aggregates, with at least one polypeptide derived from a hepatitis C virus protein NS3 region which is immunologically reactive with said hepatitis C virus specific antibody, and determining binding of said antibody to said polypeptide to recognize seroconversion in said subject.

Claim 28: The method of claim 27, wherein said polypeptide has been modified at least one cysteine residue.

Claim 29: The method of claim 28, wherein said cysteine residue has been modified by covalent attachment of a modifying group.

Claim 30: The method of claim 28, wherein said cysteine residue has been replaced by another amino acid.

Claim 31: The method of claim 27, wherein said polypeptide consists of (a) at least amino acids 21-282 of SEQ ID NO: 9 and (b) a contiguous sequence of less than 20 amino acids that is not found in hepatitis C virus proteins, wherein (b) has been concatenated to the N or C terminus of (a), or an isolated polypeptide which is at least 90% homologous thereto, wherein at

3

least one cysteine of said polypeptide is modified either by replacing it with another artificial or natural amino acid, or by a modifying group.

Claim 32: The method of Claim 29, wherein said modifying group is maleimidodioctylamine, N-methly-maleinimide, iodoacetic acid, and iodoacetamide.

Claim 33: The method of claim 30, wherein said cysteine residue has been replaced by serine, or  $\alpha$ -aminobutyric acid.

Claim 34: The method of claim 27, wherein said polypeptide consists of at least amino acids 19 to 290 of SEQ ID NO: 9, and no more than amino acids 9 to 300 of SEQ ID NO: 9.

Claim 35: The method of claim 27, wherein said polypeptide consists of at least amino acids 16 to 293 of SEQ ID NO: 9, and no more than amino acids 12 to 297 of SEQ ID NO: 9.

Claim 36: The method of claim 29, wherein said polypeptide consists of amino acids 14 to 295 of SEQ ID NO: 2.

Respectfully submitted,

FULBRIGHT & JAWORSKI L.L.P.

Norman D. Hanson Reg. No. 30,946

666 Fifth Avenue New York, N.Y. 10105 (212) 318-3000

#### VIA EXPRESS MAIL

Express Mail No.: EL642116200US

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 2023 on June 28, 20

TUNC Washington, D.C. 20231 on

Signature

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Christoph Seidel, et al.

Serial No.:

Divisional of Serial No. 08/892,704

Filed:

Concurrently herewith

For:

METHOD FOR DETERMINING EARLY HCV SEROCONVERSION

Group Art Unit:

To be Assigned

Examiner:

To be Assigned

June 28, 2001

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

### LETTER RE SEQUENCES (37 C.F.R. § 1.821e)

This application is a divisional of Serial No. 08/892/704, filed July 15, 1997, which is a divisional of Serial No. 08/511,759. A sequence listing was mailed to the USPTO on April 28, 1997, in the parent application (08/511,759).

A paper copy of the listing is attached. Please replace the current paper copy of sequence listings with the attachment. Please use the CRF of the parent case for this case.

666 Fifth Avenue New York, N.Y. 10105

(212) 318-3000

The undersigned hereby declares that to the best of his knowledge, the attached paper copy of sequences, the paper copy in the parent case and the CRF of sequence in the parent case are all identical to each other, and no new matter is presented.

Respectfully submitted,

FULBRIGHT & JAWORSKI L.L.P/

Norman D. Hanson

Reg. No. 30,946